AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 17. (Cancelled).

18. (New) A digital radio communication system comprising:

means for transmitting, on a transmitting side, a block consisting of a plurality of known pilot symbols at every slot, a predetermined number of said slots forming a frame;

means for receiving, on a receiving side, said blocks each consisting of said pilot symbols; and

means for carrying out coherent detection using the received blocks;

wherein said block consisting of said pilot symbols consists of a known pilot symbol portion and a sync word portion for frame alignment;

wherein said means for carrying out coherent detection carries out the coherent detection using said known pilot symbol portion, and employs, after establishing the frame alignment using said sync word portion, said sync word portion for the coherent detection.

19. (New) The digital radio communication system as claimed in claim 18, wherein said pilot symbol portion and said sync word portion are transmitted alternately in said block.

20. (New) A radio communication system that carries out radio communications between a base station and a mobile station on a mobile communication network using the digital radio communication system as claimed in claim 18.

21. (New) A receiver for a digital radio communication system comprising:

means for receiving a block consisting of a plurality of known pilot symbols, which has been transmitted at every slot, a predetermined number of said slots forming a frame; and

means for carrying out coherent detection using the received blocks;

wherein said block consisting of said pilot symbols consists of a known pilot symbol portion and a sync word portion for frame alignment, and

wherein said means for carrying out coherent detection carries out the coherent detection using said known pilot symbol portion, and employs, after establishing the frame alignment using said sync word portion, said sync word portion for the coherent detection.

22. (New) The receiver for a digital radio communication system as claimed in claim 21, wherein said pilot symbol portion and said sync word portion are transmitted alternately in said block.

23. (New) A digital radio communication method comprising the steps of:

transmitting, on a transmitting side, a block consisting of a plurality of known pilot symbols at every slot, a predetermined number of said slots forming a frame;

receiving, on a receiving side, said blocks each consisting of said pilot symbols; and

carrying out coherent detection using the received blocks;

wherein said block consisting of pilot symbols consists of a known pilot symbol portion and a sync word portion for frame alignment, and

wherein said step of carrying out coherent detection carries out the coherent detection using said known pilot symbol portion, and employs, after establishing the frame alignment using said sync word portion, said sync word portion for the coherent detection.

24. (New) The digital radio communication method as claimed in claim 23, wherein said pilot symbol portion and said sync word portion are transmitted alternately in said block.

25. (New) A reception method for a digital radio communication method comprising the steps of:

receiving a block consisting of a plurality of known pilot symbols, which has been transmitted at every slot, a predetermined number of said slots forming a frame; and

carrying out coherent detection using the received blocks;

wherein said block consisting of said pilot symbols consists of a known pilot symbol portion and a sync word portion for frame alignment, and

wherein said step of carrying out coherent detection carries out the coherent detection using said known pilot symbol portion, and employs, after establishing the frame alignment using said sync word portion, said sync word portion for the coherent detection.

26. (New) The reception method for a digital radio communication method as claimed in claim 25, wherein said pilot symbol portion and said sync word portion are transmitted alternately in said block.